

Forum:[Hack Forums](#)

Thread: [Python project ideas for beginners](#)

Luffy-_- - January 29, 2022, 1:14 pm

1. Number Guessing :

This project is an exciting fun game for beginners to build up. The program generates a random number from 1 to 10, or 1 to 100 any range that is specified and the user must guess the number after a hint from the computer. Every time a user's guess is wrong they are prompted with more hints to make it easier for them to guess the number but at the cost of reducing the score.

2. Rock Paper Scissors :

There are a number of functions that this program requires so let us have an overview of each.

a random function: to generate rock, paper, or scissors.

valid function: to check the validity of the move.

result function: to declare the winner of the round.

scorekeeper: to keep track of the score.

The program requires the user to make the first move before it makes one the move. Once the move is validated the input is evaluated, the input entered could be a string or an alphabet. After evaluating the input string a winner is decided by the result function and the score of the round is updated by the scorekeeper function.

If you want to make it more challenging make it GUI.

3. Text-based Adventure Game :

This is a basic version of the Adventure game. It is completely text-based. In this version of the game, users can move about through different rooms within a single setting, and based on the user input, it will provide descriptions for each room.

Movement direction is crucial here – you must create walls and set the directions in which the users can move through the rooms, set movement restrictions, and also include a tracker that can track how far a user has walked or moved in the game.

4. Dice Rolling Simulator :

As the name of the program suggests, we will be imitating a rolling dice. This is one of the interesting python projects and will generate a random number each dice the program runs, and the users can use the dice repeatedly for as long as he wants. When the user rolls the dice, the program will generate a random number between 1 and 6 (as on a standard dice).

The number will then be displayed to the user. It will also ask users if they would like to roll the dice again. The program should also include a function that can randomly grab a number within 1 to 6 and print it.

5. Hangman :

This is more of a “guess the word” game. The core concepts you have to use while developing this project are variables, random, integer, strings, char, input and output, and boolean. In the game, users have to enter letter guesses, and each user will have a limited number of guesses (a counter variable is needed for limiting the guesses).

You can create a pre-organized list of words that users can grab words from. Also, you must include specific functions to check whether or not a user has entered a single letter or if the input letter is in the hidden word, to if the user has actually inputted a single letter, and to print the correct outcomes (letters).

6. Contact Book :

Everyone uses a contact book to save contact details, including name, address, phone number, and even email address. This is a command-line project where you will design a contact book application that users can use to save and find contact details. The application should also allow users to update contact information, delete contacts, and list saved contacts.

7. Calculator :

Building this project you would learn to design a graphical UI and make you familiar with a library like Tkinter. This library enables you to create buttons to perform different operations and display results on the screen.

8. Tic-Tac-Toe :

Two players can play Tic-Tac-Toe at a time, or 1 player and a bot. The players create a 3×3 square grid.

While the first player puts “X” in any one of the squares, and the second player will put an “O” in any square. This process will continue until all the squares are filled with each player putting X and O alternatively. The player who succeeds in creating a horizontal, vertical, or diagonal with three consecutive X or O on the grid wins.

You can use the Pygame library for building this project.

9. Currency converter :

This is a simple GUI application that you can develop using Python. As you can guess by the name, you will build a currency converter that can convert currencies from one unit to another.

The main focus should be the primary function, that is, converting currency units from one to another.

10. Email Slicer :

The program helps get you the username and domain name from an email address.

Zomblerz - January 31, 2022, 11:05 am

These are good ideas for someone that wants to learn python. I like Idea number 9 using a gui to make a currency converter.

Luffy_- - January 31, 2022, 12:30 pm

(Jan 31, 2022 12:05 PM)Zomblerz Wrote: [\[CITE\]](#) These are good ideas for someone that wants to

learn python. I like Idea number 9 using a gui to make a currency converter.

Yyeah and actually what i like most about those project is that you can be creative and expand like start tic tac toe for exemple on cosole then try to make it gui same for rock scissor paper , maybe later add a bot make him smart ...

Jomama12341 - March 4, 2022, 7:51 pm

These are awesome projects. I have done a variation of the number guessing game , and the dice simulator. My final exam for my beginning python class is a text based rpg similar to D&D.

Thank you for the amazing ideas to practice with!!!

Luffy-_- - March 5, 2022, 1:46 am

(Mar 4, 2022 08:51 PM)Jomama12341 Wrote: [\[CITE\]](#) These are awesome projects. I have done a variation of the number guessing game , and the dice simulator. My final exam for my beginning python class is a text based rpg similar to D&D.

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You welcome my friend you can share source code of the projet whenever you do one here in the thread

furiouspanda1 - March 6, 2022, 9:31 am

If you are just starting out then getting to know the syntax is most important, if you want powerful tools learn how to interact with Apis you can build some amazing stuff, maybe parse some Nasa or weather data,...

rebberberber - March 15, 2022, 7:39 pm

I think I would only be able to do the first one and like a very bad version of the second one without the result function.

neoanderson101 - March 16, 2022, 10:42 am

(Jan 29, 2022 02:14 PM)Luffy-_- Wrote: [\[CITE\]](#) 1. Number Guessing :

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Luffy_- - March 16, 2022, 12:36 pm

(Mar 15, 2022 07:39 PM)rebreberber Wrote: [\[CITE\]](#) I think I would only be able to do the first one and like a very bad version of the second one without the result function.

That's good as a start, keep learning and you'll be able to do them in no time !!

(Mar 16, 2022 10:42 AM)neoanderson101 Wrote: [\[CITE\]](#) definitely gonna try this. thanks for putting this togetehr, very helpfull!

You welcome , glad it helped :)